



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/596,879

12/11/2006

Yoshitaka Nishio

49288.3300

1802

20322 7590 03/18/2009  
SNELL & WILMER L.L.P. (Main)  
400 EAST VAN BUREN  
ONE ARIZONA CENTER  
PHOENIX, AZ 85004-2202

EXAMINER

COURSON, TANIA C

ART UNIT

PAPER NUMBER

2841

MAIL DATE

DELIVERY MODE

03/18/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/596,879	<b>Applicant(s)</b> NISHIO, YOSHITAKA	
	<b>Examiner</b> TANIA C. COURSON	<b>Art Unit</b> 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28JUN06 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11DEC06</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. Figures 7-9 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the following as described in the specification:

- a) "second motor 117" (page 13, paragraph 71);

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown or the feature(s) canceled from the claim(s):

- a) claim 4, line 2, "a face which is tilted by approximately 45 degrees";

Art Unit: 2841

No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "503" has been used to designate a "motive power transmission", further specified as "includes a cylindrical cam" also reference character (503). If the drawing, Fig. 1, shows the "cylindrical cam (503)" located above the table (111), how can a "motive power transmission" also be defined to further "includes a ball screw (113)" (as is stated in Claim 6, lines 1-2) which is clearly shown to be located below the table (111). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Specification***

5. The disclosure is objected to because of the following informalities:

- a) on pages 11-12, paragraphs 50-52, correct description of the Figure, respectively, to describe that it is "Prior Art", see paragraph 1 above.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2841

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claim 1, recites on line 11, "a motive power transmission means" which is clearly described in the specification as "may include a cylindrical cam" which is defined as character (503) located above the table (111). So, how can the "motive power transmission means includes a ball screw" which is shown as character (113) clearly shown below table (111) on Figure 1. Thus, claim 6 fails to further limit the components of the scribe device as is seen in Figure 1.

With respect to claim 6: the prior art of record has not been applied to claim 6 due to the indefinite description as stated above.

8. Claims 8-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claim 1, recites in the preamble, on line 1, "A scribing head". Claims 8-9, in line 2, respectively, recites "at least one scribing head according to claim 1", which is not what was stated in the independent claim. Not only is the preamble improper, but including the term "at least one" in the claim language would signify lacking an antecedent basis that a combination of an indicator tool and a drum assembly are required in order for the apparatus to function appropriately. Thus, claims 8-9 fail to further limit the components of the scribe device as specified in the independent claim 1.

Art Unit: 2841

With respect to claims 8-9: the prior art of record has not been applied to claims 8-9 due to the indefinite description as stated above.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Piper (US 6,427,357 B1).

Piper discloses in Figures 1-3, a marking device comprising:

With respect to claims 1-5:

- a) a scribing line forming means (72) structured so as to form a scribing line on a substrate (30); and a moving means (33) for moving the scribing line forming means such that the scribing line forming means presses the substrate with a constant magnitude (column 4, lines 55-63), wherein the moving means includes: a rotation means (12) rotating about a rotation axis (Fig. 1), the axial center of the rotation axis being provided so as to align with a predetermined direction in which the scribing line forming means moves

Art Unit: 2841

(column 4, lines 55-63), and a motive power transmission means (14) for transmitting a motive power between the motive power transmission means and the scribing line forming means such that the scribing line forming means moves on a straight line along the axial center of the rotation axis in response to the rotation of the rotation means (Fig. 1), the motive power transmission means being provided along the predetermined direction (column 4, lines 55-63);

- b) wherein while the motive power transmission means continues the transmission of motive power between the motive power transmission means and the scribing line forming means, the scribing line forming means forms the scribing line on the substrate (column 4, lines 55-63);
- c) wherein the motive power transmission means is structured such that the transmission efficiency of the force to be transmitted to the scribing line forming means from the motive power transmission means and the transmission efficiency of the force to be transmitted to the motive power transmission means from the scribing line forming means are approximately the same (column 5, lines 43-48);
- d) wherein the motive power transmission means includes a face (54) which is tilted by approximately 45 degrees with respect to the circumferential direction of the rotation axis along a direction in which the motive power transmission means rotates (Fig. 2);
- e) wherein the motive power transmission means includes a cylindrical cam (22).

With respect to the preamble of the claim 1: the preamble of the claim has not been given any patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self – contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 ( CCPA 1951).

11. Claims 1 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Takamatsu et al. (US 2004/0155085 A1).

Takamatsu et al. discloses in Figure 7, a marking device comprising:

With respect to claims 1 and 7:

- a) a scribing line forming means (10) structured so as to form a scribing line on a substrate (Fig. 7); and a moving means (15) for moving the scribing line forming means such that the scribing line forming means presses the substrate with a constant magnitude (page 33, paragraph 32), wherein the moving means includes: a rotation means (6) rotating about a rotation axis, the axial center of the rotation axis being provided so as to align with a predetermined direction in which the scribing line forming means moves (page 33, paragraph 32), and a motive power transmission means (18) for transmitting a motive power between the motive power transmission means and the scribing line forming means such that the scribing line forming means moves on a straight line along the axial center of the rotation axis in response to the rotation of the



Art Unit: 2841

rotation means, the motive power transmission means being provided along the predetermined direction (page 33, paragraph 32);

- b) wherein the substrate is a kind of substrate among a glass plate, a glass substrate, a quartz plate, a quartz substrate, a sapphire plate, a sapphire substrate, a semiconductor wafer, a ceramic plate, a ceramic substrate, a solar cell substrate, a liquid crystal display panel, an organic EL panel, an inorganic EL panel, a transmissive projector substrate and a reflective projector substrate (Fig. 7).

With respect to the preamble of the claim 1: the preamble of the claim has not been given any patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self – contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 ( CCPA 1951).

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art cited on PTO-892 and not mentioned above disclose a marking device:

Wakayama (US 7,439,665 B2)

Wakayama et al. (US 6,901,670 B2)

Kekar et al. (US 6,822,315 B2)

Art Unit: 2841

Bergfelt et al. (US 4,221,150)

Browning (US 2,403,633)

Klages (US 2,357,206)

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania C. Courson whose telephone number is (571) 272-2239.

The examiner can normally be reached on Monday-Friday from 7:30AM to 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard, can be reached on (571) 272-1984.

The fax number for this Organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

Art Unit: 2841

like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. Bradley Bennett/  
Primary Examiner, Art Unit 2841

TCC  
March 12, 2009